

North Carolina  
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary  
Dexter R. Matthews, Director



August 28, 2006

NAVFAC Atlantic  
Attn: Daniel R. Hood  
Code: OPCEV  
NC/Caribbean IPT, EV Business Line  
6506 Hampton Blvd  
Norfolk, VA 23508-1273

RE: Comments and concurrence on the Responses to Comments on the Draft Pilot Study Report, Operable Unit (OU) #20, Site 86  
Air and Ozone Sparging using a Directionally Drilled Horizontal Well  
MCB Camp Lejeune, NC  
CERCLA Site NC6170022580  
Jacksonville, Onslow County, North Carolina

Dear Mr. Hood:

The NC Superfund Section has received and reviewed the Responses to Comments on the Draft Pilot Study Report for Air Sparging with Ozone addition at OU#20, Site 86 at the Camp Lejeune, MCB Superfund Site located in Jacksonville, NC. With the following exception the State **concurs** with the response to NC DENR comments. The following comments are also for the Wilmington Regional Office Water Quality Section responses to comments. These additional comments are for the Partnering Teams consideration.

**Specific Comments:**

1. Please include a note in the Water level measurements section and the Site Hydrology section of the Final Pilot Study Report for Site 86 stating that: **CH2M HILL will issue a separate Technical Memorandum regarding the water level study completed at Site 86. This memo will evaluate the significance and extent of hydraulic responses resulting from operation of the horizontal sparge well.** The water level issue should at least be referenced if not summarized in the Pilot Study Report.

**CH2M HILL Response to Comment 4:**

**CH2M HILL will issue a separate Technical Memorandum regarding the water level study completed at Site 86. This memo will evaluate the significance and extent of hydraulic responses resulting from operation of the horizontal sparge well.**

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Mr. Daniel Hood

8-28-2006

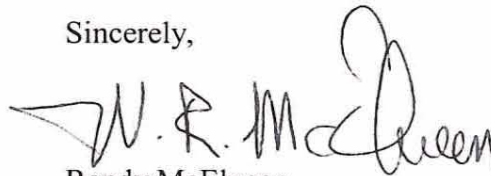
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**NC Superfund Section Comment #4:**

In the Lessons Learned Section on page 4-2, we should also discuss the extreme and extensive groundwater elevation changes that occurred in the area during the air/ozone sparging process. The shallow (not the Castle Hayne) groundwater flow direction changed significantly in the area of Site 86 extending all the way out to the 303/318 Solid Waste Management Unit (SWMU) plume. This issue (groundwater elevation changes) is briefly noted in the site hydrology section on pages 1-2 and 1-3 and should also be discussed in the water level measurements section. How soon after shut down of the sparging system did the groundwater elevations return to normal?

If you have any questions or comments, please contact me, at (919) 508 8467 or email [randy.mcelveen@ncmail.net](mailto:randy.mcelveen@ncmail.net)

Sincerely,

A handwritten signature in black ink, appearing to read "W. R. McElveen".

Randy McElveen  
Environmental Engineer  
NC Superfund Section

Cc: Dave Lown, NC Superfund Section  
Bob Lowder, EMD/IR  
Gena Townsend, USEPA